

electrode surface "has" a transparent electrically conductive layer in or on it. The original German claim also recited that the pattern of strips or grid "aus metallisch leitfähigem Material aufweist". This translates that the pattern of strips or grid is made of metallic conductive material. The verb "aufweist" is again used at the end of the German claim, and the meaning is the same as before, namely, the transparent electrode surface "has" a periodic or aperiodic pattern of strips or grid of metallic conductive material.

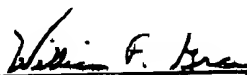
In Fig. 1, one electrode is shown as the combination of 5, 6, and 7, while the other electrode is shown as the combination of 1 and 2. Each electrode necessarily has a surface, and the electrochromic medium is between these surfaces. The transparent electrode in Fig. 1 is the combination of 5, 6, and 7, and with respect to this electrode, the transparent electrically conductive layer is the ITO layer 5. The pattern of strips or grid in/on this electrode is shown as 6, and is aperiodic in this figure.

In Fig. 2, each pair of display segments is a display element. The transparent electrically conductive ITO layers are indicated as 5 and 5', the pattern of strips or grid are shown as 6 and 6', and the borders of the segments are shown as 9 and 9'.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

In view of the above amendments and explanations, this application is deemed to be in condition for allowance, and allowance is accordingly requested.

Respectfully submitted,



William F. Gray
Bayer Corporation
400 Morgan Lane
West Haven, CT 06516-4175

Reg. No. 31018
Phone: (203) 812-2712
Date: 11 Feb. '03

Version with markings to show changes made:

In the claims:

Claims 1, 5 and 7 have been amended as shown below:

Previously amended claims 2-4, 6, and 8-13 are shown in the list below for the convenience of the examiner.

1. (Twice Amended) An electrochromic display element containing an electrochromic medium between two electrode [sheets, where] surfaces, in which at least one of the electrode [sheets] surfaces is transparent and has a transparent, electrically conductive layer, characterized in that the at least one transparent electrode [sheet or sheets has/have] surface has a periodic or aperiodic pattern of strips or grid made of [a] metallic conductive material [having metallic conductivity].
2. (Amended) The electrochromic display element according to Claim 1, characterized in that the electrochromic medium is a solution, a gel or a solid.
3. (Amended) The electrochromic display element according to Claim 1 or 2, characterized in that the electrochromic medium contains at least one pair of redox substances of which one is reducible and the other is oxidizable, where both are colourless or only slightly coloured and one substance is reduced and the other is oxidized on application of a voltage to the display element, with at least one becoming coloured, and after switching off the voltage the two original redox substances are formed again and the display element decolorizes.
4. (Amended) The electrochromic display element according to Claim 3, characterized in that

- a) the reducible substance has at least two chemically reversible reduction waves in the cyclic voltammogram and the oxidizable substance correspondingly has at least two chemically reversible oxidation waves, or
 - b) the reducible substance and the oxidizable substance are covalently bound via a bridge, or
 - c) the reducible and/or oxidizable substances selected are ones in which the reversible transition between the oxidizable form and the reducible form or vice versa is associated with the breaking or the formation of a σ bond, or
 - d) the reducible substance and the oxidizable substance are metal salts or metal complexes of metals which exist in at least two oxidation states, or
 - e) the reducible and/or oxidizable substances are selected from the group consisting of oligomers and polymers which contain at least one of the redox systems mentioned or else pairs of such redox systems as are defined under a) to d), or
 - f) the reducible and/or oxidizable substances used as mixtures of the substances described in a) to e), provided that these mixtures contain at least one reducible and at least one oxidizable redox system.
5. (Three Times Amended) The electrochromic display element according to Claim 1, characterized in that both electrode [sheets] surfaces have a periodic or aperiodic pattern of strips or grids made of [a] metallic conductive material [having metallic conductivity].

6. (Amended) The electrochromic display element according to Claim 5, characterized in that the lines of the pattern of strips of the two electrodes form an angle with one another.
7. (Three Times Amended) The electrochromic display element according to Claim 1, characterized in that the pattern of strips or grid made of [the] metallic conductive material [having electrical conductivity] is aperiodic on at least one electrode.
8. (Amended) The electrochromic display element according to Claim 7, characterized in that the periodicity of the pattern of strips or grid on at least one electrode is restricted to a very short distance.
9. (Twice Amended) display element according to Claim 7, characterized in that the arrangement of the aperiodic grid is such that the mean of the distance between two neighboring points of intersection of the grid, taken over all points of intersection of the grid, corresponds to the dot spacing of a periodic dot grid having the same size and the same number of grid points and in that the autocorrelation function of the grid decreases rapidly in all directions for values which are greater than said dot spacing.
10. (Twice Amended) The electrochromic display element according to Claim 1, characterized in that said pattern of strips or grid on the electrode or electrodes is deposited on the transparent, electrically conductive layer.
11. (Twice Amended) The electrochromic display element according to Claim 1, characterized in that the transparent, electrically conductive layer on the electrode is deposited on said pattern of strips or grid.

12. Twice Amended) The electrochromic display element according to Claim 1, characterized in that said pattern of strips or grid of at least one electrode has a minimum mesh spacing of 3 mm.
13. Twice Amended) The electrochromic display element according to Claim 1, characterized in that said pattern of strips or grid has a maximum optical density of 0.3.